

Welcome to the Biweekly Restoration Information Update Page. This web site

- Provides current information on wetland and river corridor restoration projects
- Recognizes outstanding restoration projects
- Provides a forum for information sharing

We welcome the submission of articles and announcements related to your restoration project. Just send your write-up to EPA's contractor at restorationupdate@tetrattech-ffx.com or mail it to Kathryn Phillips, Biweekly Restoration Update Coordinator, Tetra Tech, Inc., 10306 Eaton Place, Suite 340, Fairfax, VA 22030. We will carefully consider your submission for inclusion in a future update. If your submission is selected, please note that it might be edited for length or style before being posted. Because this web site is meant to be a public forum on restoration information, we cannot post any information that is copyrighted or information that serves or has the appearance to serve as advocating or lobbying for any political, business, or commercial purposes.

Contents

- [Feature Article](#) - Our feature article recognizes outstanding restoration projects or programs.
- [Five-Star Restoration Projects Update](#) - Five-star restoration projects will be revisited periodically to see if the modest amount of funding, between \$5,000 and \$20,000, has helped the local restoration partners achieve their goal.
- [Community-Based Restoration Partnerships](#) - This section highlights innovative community-based partnerships working to restore wetlands and river corridors.
- [Funding for Restoration Projects](#) - Here you'll find information pertaining to grants and other funding sources available to local watershed groups and other grassroots community organizations to implement restoration projects.
- [News and Announcements](#) - This section includes up-to-date information on regulatory issues affecting restoration, conference and workshop announcements, and other newsworthy tidbits.
- [Restoration-Related Web Sites](#) - Check out other groups on the Web that are helping in the effort to restore wetlands and river corridors.
- [Information Resources](#) - Books, journals, fact sheets, videos, and other information resources to aid you in your restoration project are provided here.
- [Ask a Restoration Question](#) - Post your restoration related question. Answers will be provided by the EPA and Bi-Weekly readers.

Feature Article

California Program Gives Urban Streams New Life

A long-standing California grant program is helping local governments and nonprofit groups restore urban streams. Annually since 1985, the California Department of Water Resources' Division of Planning and Local Assistance has provided grant funds through its Urban Streams Restoration Program. The program is designed to support projects that reduce flooding and erosion along urban streams while improving the environment. In the past grants have funded a variety of activities such as creek cleanups, revegetation efforts, bioengineering bank stabilization projects, channel reconfiguration to improve stream geomorphology, and acquisition of parcels or easements critical for flood management.

The program distributed \$10 million in FY 2002 for local projects, up from \$2 million the year before. The significant increase in funding is the result of the recent passage of the Costa-Machado Water Bond Act of 2000, which provided a total of \$25 million to the program. Funding for 26 projects in 2001–2002 ranged from a \$36,352 grant to the Marin County Department of

Public Works and the Lucas Valley Homeowner's Association to stabilize seven eroded streambank areas along Miller Creek to a \$1 million grant to the City of Santa Rosa to restore and revegetate streambanks as part of a larger effort to establish a greenway along Santa Rosa Creek. Applications were accepted through March 6, 2002, for FY 2003; approximately \$9.5 million is expected to be available.

Previous Successes

The program has supported nearly 200 projects since its inception. Because of the program's longevity, the California Department of Water Resources can see how project areas continue to improve over time. For example, in 1991 the program helped to fund a daylighting project along a culverted section of Jolly Giant Creek in Arcata, California. Project elements included daylighting a 120-foot culverted section of the creek, constructing a new deep water habitat, placing in-stream structures such as rootwads and rock weirs for habitat enhancement, restocking with native fish, and revegetating streambank areas (Figure 1). Once the stream was removed from the culvert, flooding of nearby roadways decreased significantly. Almost 10 years later the site continues to improve. Figure 2, a photo taken in July 1999, shows the restored portion of the stream now surrounded by a healthy riparian buffer.

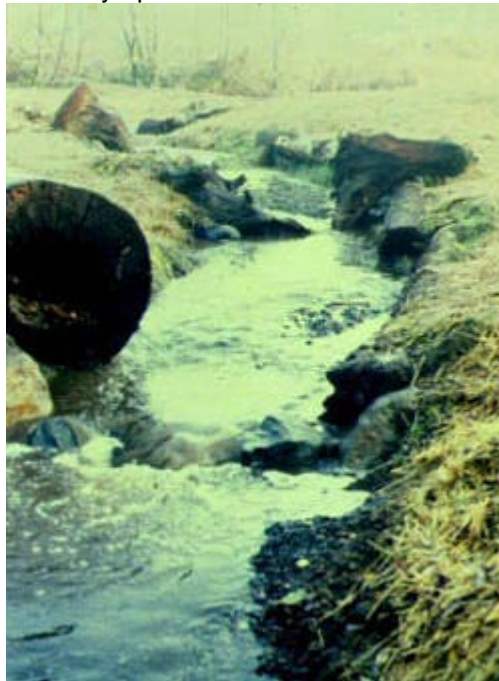


Figure 1: Jolly Giant Creek Before Restoration (1991)



Figure 2: Jolly Giant Creek After Restoration (1999). Note log on left side of creek for reference.

Another example of a successful project is Brush Creek in Santa Rosa. In 1995 a coalition of citizens and local government agencies restored 1,100 feet of the creek, which was contained within a trapezoidal riprap channel with a 2:1 slope along the banks (Figure 3). The partners removed an adjacent maintenance road to provide room to increase the channel size and capacity. They recontoured the channel banks to allow for 12 to 14 feet of added width, created a low-flow channel in the creek bed, and added rootwads and boulders to establish a pool/riffle sequence. To protect the recontoured channel banks from erosion, project partners planted grass and native riparian vegetation and lined the streambanks with erosion control fabric where needed. By spring 2000 the area was completely revegetated (Figure 4). This project was completed as part of the Master Plan for Santa Rosa area streams, which provides for alternatives to the traditional types of flood control along streams in urban areas.



Figure 3: Brush Creek Before Restoration (1995)



Figure 4: Brush Creek After Restoration (2000)

For more information see <http://www.dpla.water.ca.gov/environment/habitat/stream/usrp.html> or contact Sara Denzler at the California Department of Water Resources, Division of Planning and Local Assistance, Urban Streams Restoration Program, P.O. Box 942836, Sacramento, CA 94236-0001. Phone: (916) 651-9625.

If you'd like your project to appear as our next Featured Article, e-mail a short description to restorationupdate@tetrattech-ffx.com.

[Top](#)

Five-Star Restoration Projects Update

The goal of EPA's Five-Star Restoration Program is to bring together citizen groups, corporations, Youth Conservation Corps, students, landowners, and government agencies to undertake projects that restore streambanks and wetlands. The program provides challenge grants, technical support, and peer information exchange to enable community-based restoration projects. A few Five-Star Restoration projects are being revisited to see if the modest amount of funding (between \$5,000 and \$20,000) has helped the local restoration partners achieve their goals.

Project Name: Dupont Educational Wetland Project

Five-Star Grant: \$7,900

Grant to: Dupont Company

Project Location: LaPorte, Texas

Grant Year: 1999

Original Project Description:

The primary goal of the development of a freshwater wetland at the Dupont LaPorte plant in LaPorte, Texas, is to establish a facility that provides many educational opportunities for students, the public, and Dupont employees. The educational opportunities are the primary goal, but not at the price of an ecologically sound design. The wetland, which will have a total water surface area of 0.5 acre, will be composed of four zones, which will actually act as four subhabitats. The differing slopes and water depths will allow plants and wildlife to seek out the specific niches that best suit them. In addition, the far side of the wetland will be designated an exclusionary zone. This zone will provide animals—especially birds, small mammals, and amphibians—with migratory corridors and nesting areas free of human disturbance. The wetland will be located at the Dupont training center. Interpretive signage explaining the plant, animal, and fish species in the wetland will be placed in key areas. It is hoped that the combination of educational and ecological goals will lead to a wetland that can benefit all.

Update:

The Dupont Educational Wetland Project continues with vigor! In 2001 the project staff gave presentations on the status of the project at the State of the Bay Symposium and at the Communities Working for Wetlands Conference. The project received a Galveston Bay Stewardship Award, was chosen for the cover of the *LaPorte Chamber of Commerce Directory* (published once a year), and received recognition in the *Dupont Sustainable Growth 2000 Progress Report* (a corporate-level publication). The partnership with LaPorte High School environmental science students continues to flourish. Students visit monthly to perform water quality monitoring and to inventory wetland wildlife. Students also dedicate one full workday per semester to wetland maintenance and plan to erect a bat house later this semester. The wetland continues to become more diverse: nematodes, a snapping turtle, and resident snakes are the newest additions. The Dupont Educational Wetland continues to attract the attention of visitors to the LaPorte site and is an asset to the site and the community. **[Updated September 2001.]**

Project Title: Hashamomuck Pond Wetland Restoration

Five Star Grant: \$10,000

Grant to: Suffolk County Department of Labor

Location: Southold, New York

Grant Year: 1999

Original Project Description:

The Suffolk County Department of Labor will restore a salt marsh in Hashamomuck Pond, near the most productive shellfish bed in the town of Southold. At-risk youth will perform the restoration work in partnership with the Southold Town Trustees, Peconic Land Trust, and Cornell Cooperative Extension. Environmental education and job skills training will be elements of the project. The National Marine Fisheries Service's Community-based Restoration Program is providing partial funding for this project.

Update:

The Restoration of Hashamomuck Pond was scheduled in two phases. Phase 1 of the project was to excavate and grade the dredge spoils covering a former salt marsh, and phase 2 was to plant 2 acres of the salt marsh with native marsh plants.

The first phase was completed in spring 1999 before the receipt of Five-Star Project funds. The Suffolk County Department of Labor used the Five-Star grant money to purchase plant materials and pay for labor to complete the second phase of the project. The Department of Labor organized a Youth Conservation Corps crew to provide labor for this phase. The main work of the Corps members, who were mostly economically disadvantaged youth, consisted of planting intertidal stands of cordgrass (*Spartina alterniflora*).

As a result of the youths' work and the growth of the cordgrass plantings, area residents have noted increased populations of waterfowl and shorebirds inhabiting the salt marsh. Through the completion of the restoration project, young people from the Youth Conservation Corps learned new job skills and were exposed to the exciting and rewarding field of ecological restoration. Over the course of the project, youth asked a variety of insightful questions that indicated their interest in the project.

Since the completion of phase 2, no further restoration work has been completed at the site. The Suffolk County Department of Labor hopes to further increase the size of the restored marsh in the future through the creation of additional brackish tidal ponds in filled areas surrounding the marsh. [Updated February 2002.]

Project Name: Lions Levee Park Observation Station

Five Star Grant: \$7,500

Grant to: Marathon Ashland Petroleum

Project Location: St. Paul Park, MN

Grant Year: 1999

Original Project Description:

Marathon Ashland Petroleum (MAP) plans to build a viewing platform at the Lions Levee Park, which overlooks the Mississippi River, adjacent to the Marathon Ashland Refinery in St. Paul Park, Minnesota. Construction is to be done by the Minnesota Conservation Corps. Additional support for site preparation, signage, and story boards will include such sponsors as the City of St. Paul Park and the St. Paul Park Lions. The Marathon Ashland Citizens Advisory Panel Wildlife Habitat Committee will pay all costs.

Update:

With funding from the Five-Star program, an Americorps team of volunteers cooperated with St. Paul Park City's Public Works Department and Marathon Ashland Petroleum to build an observation platform adjacent to the MAP refinery. The observation platform allows all residents and visitors to take advantage of the panoramic view of the Mississippi River and to observe the wildlife. The team also constructed a trail with signage explaining the history of the site and all its vegetation.

To complement the observation station, a wildlife habitat work party was held on May 6, 2000. More than 50 volunteers participated. The volunteers planted more than 300 white spruce seedlings, cleaned up debris on the surrounding properties, and formally dedicated the observation station at the Lions Levee Park. Teams of Girl Scouts and Boy Scouts participated in

the event, which allowed them to earn merit badges while helping the environment. The local media were on hand to give recognition as well. [Updated September 2001.]



Project Title: Winsegansett Marsh Restoration

Five Star Grant: \$9,700

Grant to: Buzzards Bay Project

Location: Fairhaven, Massachusetts

Grant Year: 1999

Original Project Description:

The Buzzards Bay Project, in partnership with private landowners, local nonprofits, and federal, state, and local agencies, will conduct a demonstration restoration project in the Winsegansett salt marsh, in the town of Fairhaven. The upper portion of the marsh is suffering from a greatly reduced tidal flow and cannot sustain the diversity of wetlands vegetation typical of healthy salt marshes. The project will replace three small culverts located under privately owned footpaths in the upper marsh. The Coalition for Buzzards Bay also will conduct public education using the site as a demonstration site for other landowners, local government officials, and natural resource managers. The National Marine Fisheries Service Community-based Restoration Program is providing partial funding for this project.

Update:

Using funds from the Five-Star Restoration Challenge Grant, the Buzzards Bay Project and the Town of Fairhaven removed three undersized 10-inch culverts from beneath private footpaths crossing Winsegansett Marsh. Each 10-inch culvert was replaced with two 24-inch culverts donated by the Town of Fairhaven.

The Buzzards Bay Project staff set up several monitoring stations to record salt marsh health before and after the construction efforts. Baseline data were gathered previous to the footpath culvert replacements, and volunteers continued monitoring after the construction was complete. Volunteers are eager to continue monitoring to determine the effectiveness of the restoration project now that all the culverts have been replaced.

The Buzzards Bay Project staff also developed a brochure to spread the word about the restoration project. It explains the need for tidal flow into salt marshes and outlines the restoration

efforts completed through the Winsegansett Marsh project. The brochure will be distributed to local nonprofit conservation organizations and interested citizens. The project was also publicized through articles in a local newspaper, *The Advocate*. **[Updated March 2002.]**

For more information on EPA's Five-Star grant program, visit

<http://www.epa.gov/owow/wetlands/restore/5star/>.

[Top](#)

Community-Based Restoration Partnerships

Restoring Riparian Zones for the Songbirds

Riparian restoration along Utah's Jordan River is improving both the river's water quality and the songbird habitat along its banks. The Jordan River is a migration and habitat corridor between Utah Lake and the Great Salt Lake, and a biological sanctuary between Utah's west desert and the Wasatch Range. It is also located at the heart of the Great Salt Lake flyway and is a crucial stopover for hundreds of thousands of migrating birds each season. TreeUtah, a nonprofit group, is working in partnership with the Utah State Division of Parks and Recreation and the Natural Resources Conservation Service to restore the vegetation in the riparian zone to help restore songbird populations.

With the help of more than 8,000 volunteers, TreeUtah has planted more than 59,600 seedlings on four different sites along the Jordan River since 1995. Seedlings include species such as peach-leaf willow, sandbar willow, boxelder, black hawthorn, chokecherry, wood rose, golden currant, and other important native species. TreeUtah expects that these native plants will help restore the populations of western wood-pewees, willow flycatchers, common yellowthroats, northern orioles, veeries, warbling vireos, yellow warblers, yellow-rumped warblers, yellow-breasted chats, western tanagers, and many other species. TreeUtah is expanding the program to encourage volunteers to not only plant the trees, but also to care for them over time. For more information contact TreeUtah, 511 West 2nd Street, Suite 150, Salt Lake City, UT 84101. Phone: (801) 364-2122; e-mail: treeutah@treeutah.org; Internet: <http://www.treeutah.org/>.

Small Restoration Project Makes a Big Impact

Although the initial project goals have been fulfilled, community members in a small town in Virginia continue to work on restoring the riparian area in a local park. Why? Because it serves as an outdoor classroom for more than 600 students at a local elementary school as well as the public.

Wildwood Park is located on 11 acres along the North River, a tributary of the Shenandoah River in the Chesapeake Bay watershed. Once a homestead, the land was sold to the Town of Bridgewater in the 1970s and was dedicated as a community park shortly thereafter. A large portion of the park acreage was allowed to grow wild for the next 25 years, until major floods in September 1996 and January 1997 roared through the area, knocking down trees and depositing debris from upstream. After the floods, the Town of Bridgewater cleaned the area—removing the debris and downed trees, including all the existing understory vegetation. To make the area aesthetically pleasing, the Town then planted the entire area with grass. The once "wild" area known as Wildwood had become only tall trees and grass. It looked very park-like but was not very friendly to wildlife or the environment.

In April 1998 the Shenandoah Chapter of the Virginia Native Plant Society began working with the town, Bridgewater College, John Wayland Elementary School, and Shenandoah Valley Pure Water 2000 Forum (the local watershed organization) to restore the wetland and riparian areas that had been destroyed during and after the flood. Using approximately \$5,000 in grant funds from the town and Pure Water 2000 Forum, the partners set out to restore the park. They held two major planting events—one in the fall of 1998 for all 600 students at John Wayland Elementary School and one in the spring of 1999 for more than 60 community members. After the initial funds were depleted, a teacher received additional grant funds from the Forum in 2000, some of which was used to purchase plants to continue restoration as part of the curriculum. The Town of Bridgewater continues to provide support for the project in the form of trees, mulch, labor, and signs describing the restored area.

"With the help of the students and our other partners, the restoration project has come a long way," explains Carol Gardener, President of the Virginia Native Plant Society. "We've planted almost 850 perennials and almost 450 trees and shrubs. Most of these plants have survived, despite drought years, and we are seeing wildlife and birds that were not seen here before." Efforts are expected to continue indefinitely. For photos of the project, see http://www.bridgewater.edu/~lhill/wildwood_park.htm. For more information, contact Joan Kenney, John Wayland Elementary, 801 North Main Street, Bridgewater, VA 22812. Phone: (540) 828-6081; e-mail: jkenney@rockingham.k12.va.us. *If you are part of an innovative community-based partnership that is working to restore river corridors or wetlands, we'd like to hear from you. Please send a short description of your partnership to restorationupdate@tetrattech-ffx.com.* [Top](#)

Achieving Restoration Results

Restoring Coastal Wetlands in Texas

Coastal areas at Galveston Island State Park now offer better habitat for wildlife. A restoration project completed by Texas Parks and Wildlife in spring 2000 produced 130 acres of new intertidal marshes and 100 acres of seagrass beds, protected more than a square mile of shallow bay and tidal habitats, and resulted in increased fish and wildlife activity. In addition to restoring the natural wetland environment, Texas Parks and Wildlife enhanced public access by rebuilding bridges and walkways destroyed or damaged by storms and hurricanes. Completed at a cost of \$2.16 million, the project was the largest of its kind ever undertaken at a Texas state park.

"In the mid-1990s at this site alone we were losing 100 acres of tidal marsh annually, and that reflects what's been going on for decades across the Galveston Bay system. Now we're showing how restoring coastal marshes can turn that trend around. It would not have happened without federal funding, coordination between many partners, and support from the local community and property owners," comments Robert L. Cook, Texas Parks and Wildlife's executive director. Funding for the project was provided by the U.S. Fish and Wildlife Service and the Apex Restoration Fund, which consists of Texas Parks and Wildlife, Texas Natural Resource Conservation Commission, Texas General Land Office, Galveston Bay Estuary Program, and the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration. The Apex Restoration Fund came from a compensation settlement from the 1990 Apex barge oil spill in Galveston Bay.

The project's success has not gone unnoticed. This year Coastal America has selected the Galveston Island State Park restoration project for a Coastal America Partnership Award. Coastal America bestows the award to only a handful of outstanding projects each year. Coastal America is a partnership of the Executive Office of the President, 11 federal departments, and state, local, and private organizations. For more information about the park, see <http://www.tpwd.state.tx.us/park/galvesto/galvesto.htm>.

Orange Creek Is a Creek No More

According to the spring 2002 issue of *Streamlines*, published quarterly by the St. Johns River Water Management District, 1,500 acres of wetlands have been restored at the Orange Creek Restoration Area in Florida's southern Alachua and northern Marion counties. In the 1930s a canal was excavated through vast sawgrass marshes and wet prairies in the eastern portion of Orange Lake. This man-made channel, known locally as Orange Creek, became part of a levee and canal system that was constructed to convert 1,500 acres of marsh for agricultural purposes, primarily row-crop production and cattle grazing.

To restore the area, the District removed all levees and canals (a distance of 174,000 feet involving 665,000 cubic yards of material), constructed 40 habitat islands, and planted 1,300 wetland trees and 40,000 cordgrass plugs. They also constructed 1,000 feet of access road, relocated and removed 2 miles of powerline, and demolished a bridge and replaced it with a pedestrian bridge for public access. The District completed the project in late 2001.

In partnership with the U.S. Department of Agriculture's Natural Resources Conservation Service, the District acquired the 3,415-acre property to reduce agricultural discharge, improve water

quality, and restore converted wetlands. The restoration project was funded through the Wetland Reserve Program, St. John's River Water Management District, and wetland mitigation projects. For more information, contact the District at (386) 329-4500 or (800) 451-7106.

If you are part of an innovative restoration project that has had positive results, we'd like to hear from you. Please send a short description of your project to restorationupdate@tetrattech-ffx.com.

[Top](#)

Funding for Restoration Projects

New Listings:

New York's Wildlife Conservation Society Offers Grants for Bronx River Projects

On March 8, 2002, Congressman José E. Serrando (D-NY) announced the appropriation of \$7,851,000 for the restoration and renewal of the lower Bronx River from the New York Botanical Gardens to the river's confluence with the Long Island Sound. The Wildlife Conservation Society (WCS), in partnership with the National Oceanic and Atmospheric Administration's Community-Based Restoration Program, will oversee the multiyear grant to restore coastal habitats, acquire land that improves public access, and establish educational programs that foster stewardship of the degraded river.

Projects funded through this partnership will benefit the local community and involve citizen groups, nongovernmental organizations, businesses, and government agencies. WCS, with input from a steering committee, will work with the local community to develop strategies and implement projects for the benefit of the lower Bronx River ecosystem and the communities along the river. This cooperation is expected to strengthen ongoing working partnerships and create new relationships and innovative approaches to achieve the goals of restoring fishery habitat, increasing community awareness, and instilling a greater sense of pride for the Bronx River.

WCS is currently accepting applications for projects of up to 2 years in duration, to be completed by no later than May 31, 2004. Proposals should focus on one or more of the following activities: habitat restoration, land acquisition, or public access benefitting the marine, estuarine, and/or anadromous fishery resources of the river. Applications must be received by May 30, 2002. Further information on eligibility and project requirements is available at <http://www.wcs.org/> or from Jan Kaderly at (718) 220-6394.

Please send any news you have on funding mechanisms available to local community organizations to restorationupdate@tetrattech-ffx.com.

[Top](#)

News and Announcements

EPA Releases Coastal Assessment Report

EPA recently released the *National Coastal Condition Report*, the first environmental report card on the quality of the water at the nation's coasts. The report presents a broad baseline picture of the overall condition of U.S. coastal waters as fair to poor, varying from region to region. The report also rates the loss of coastal wetlands as poor, noting that close to 50 percent of the wetlands remaining in 1780 no longer existed in 1980. The report primarily evaluates estuaries, areas where rivers meet the ocean, in the continental United States. The findings in the report were based on seven coastal water quality indicators: water clarity, dissolved oxygen, coastal wetland loss, eutrophic condition, sediment contamination, ecological condition of bottom-dwelling organisms, and fish tissue contamination. Data for these indicators were gathered from EPA, the National Oceanic and Atmospheric Administration, the U.S. Geological Survey, and the U.S. Fish and Wildlife Service. The report will serve as a benchmark for measuring progress in coastal programs in the future. EPA intends to conduct additional studies on more specialized coastal issues and measure condition changes over time. For more information and to view the document on-line, see <http://www.epa.gov/owow/oceans/nccr/>. A paper copy of the report (EPA620-R-01-005) can be obtained by calling (800) 490-9198.

Waterfowl and Researchers Agree: Restored Wetlands Can Be as Good as Natural

According to a press release issued by Ducks Unlimited (DU) on February 5, 2002, a study published in the *Journal of Wildlife Management* showed that waterfowl and grassland birds use wetlands restored by Ducks Unlimited as much as, if not more than, natural wetlands. "This study is important because it provides tangible evidence that we can restore wetlands to their natural value for waterfowl and other wildlife," says Dr. Jim Ringelman, Senior Director of Planning and Conservation for DU's Great Plains Regional Office.

"Our biologists and engineers have been restoring wetlands in the Prairie Pothole Region since 1984, and we constantly strive to refine our methods," says Ringelman. "Restoration ecology can be a tricky business so it's nice to learn that our approaches work. The response of birds and other wildlife is our ultimate measure of success."

Dr. John Ratti, Research Professor in the University of Idaho's Department of Fish and Wildlife Resources, led the study. "The primary reason for conducting this study was to see if DU's restored wetlands are functioning like natural wetlands," explains Ratti. "Given the millions of dollars spent on restoration, it's important to evaluate projects and ensure that every dollar is being spent well."

"Using avian communities as an indication of how those restored ecosystems are functioning, we know that DU's habitat restoration work is functioning as it should," says Ratti. Ratti's team compared 39 wetlands restored by DU to 39 natural wetlands, all of which were located in the Prairie Pothole Region (also known as "The Duck Factory") of North and South Dakota. The team paired each restored wetland with a nearby natural wetland of the same size and classification and in the same geographic region. During the spring and summer of 1997 and 1998, researchers counted and recorded waterfowl and upland birds and compared bird numbers, species numbers, and waterfowl breeding pairs. The team concluded that "restored wetlands in the Prairie Pothole Region supported similar avian communities with equal or higher abundances than those of natural wetlands." For the original press release, see

http://www.ducks.org/news/study_wetlands_research.asp.

World's Largest Freshwater Diversion Project Opened

On March 26, 2002, water flowed through massive metal gates for the first time as a ceremony was held to dedicate the Davis Pond Freshwater Diversion project, 23 miles up the Mississippi River from New Orleans. The \$119.6 million project, the world's largest freshwater diversion project, will reintroduce fresh water, nutrients, and sediment to the salt-threatened Barataria estuary, which stretches south to the Gulf of Mexico. A similar but smaller project, the Caernarvon Freshwater Diversion, opened in 1991 about 15 miles downriver from New Orleans and serves as an example of the success of this type of project.

Governor Mike Foster says Davis Pond is "one of the most important projects in the fight against the loss of our coast. It is located in the middle of the area that's experiencing some of the highest rates of land loss in our state."

Foster is excited about the possibilities of the project, commenting, "The Caernarvon Freshwater Diversion Project shows that these projects do a lot more than reduce salinity—they actually build new marsh. This project should build marsh where we need it most and is an example of the types of projects we want to focus on as a priority in our nation's conservation agenda."

The project's key feature is a reinforced-concrete diversion structure built into the mainline Mississippi River levee, with four 14- by 14-foot gates. It will divert up to 10,650 cubic feet per second to help restore vanishing wetlands that stretch to the Gulf of Mexico. Davis Pond is the second major freshwater diversion project built by a partnership of the U.S. Army Corps of Engineers and the Louisiana Department of Natural Resources. For more information, see

<http://www.mvn.usace.army.mil/pao/RELEASES/DavisPond.pdf>. (PDF document)

[Top](#)

Upcoming Conferences and Events:

NEW LISTINGS:

May Is American Wetlands Month

Each May thousands of Americans celebrate the uniqueness, beauty, and importance of wetlands through the on-the-ground projects, activities, and events of American Wetlands Month. The Isaac Walton League offers an American Wetlands Month kit to assist local groups in initiating projects. The kit includes fact sheets on wetlands, project ideas, case studies of projects

from across the country, step-by-step information on how to coordinate specific projects, and links to many informative wetland sites. This year's theme is "Bogs, Playas, Pools: Protect America's Unique Wetlands!" For more information visit <http://www.iwla.org/SOS/awm/>.

International Migratory Bird Day (IMBD)

May 11, 2002

Partners in Flight—a coalition of federal and state agencies, bird clubs, nongovernmental organizations, corporations, and individuals, whose mission is to conserve migratory birds—created IMBD to increase public awareness of the factors that might contribute to declines in bird populations. This year's theme, "A Celebration of Special Places for Special Birds," will focus on the need to conserve habitat for migratory birds. This habitat includes places at either end of the birds' seasonal journeys as well as stopover points along the way. More information can be found at <http://www.americanbirding.org/imbd/imbdgen.htm> or by calling the IMBD Information Center at (703) 358-2318.

National River Cleanup Week

May 11–18, 2002

National River Cleanup Week traditionally occurs during the second or third week of May each year. It was originally conceived in response to a recognition that America's streams and rivers were in need of cleaning because of the careless disposal of trash and other debris. America Outdoors, a nonprofit organization that supports outdoor outfitters and guides, provides organizational, promotional, and educational assistance to groups willing to organize a cleanup effort. For more information, visit <http://www.adventuresports.com/asap/ao/> and click on "National River Cleanup Week Information."

Monitoring and Maintenance Earth Day Workshop

April 20, 2002

Gaithersburg, Maryland

The Izaak Walton League's Save Our Streams Program is holding a follow-up workshop on "The Monitoring and Maintenance of Stream Bank Stabilization Projects" on Saturday, April 20, 2002, in Gaithersburg, Maryland. This workshop will review monitoring and maintenance techniques for sustaining successful bank stabilization projects and will include time in the field performing maintenance of a previously stabilized buffer section of Muddy Branch. The workshop will run from 9 a.m. until 3 p.m. and will take place at the Izaak Walton League's national office. Please dress for working outside. The registration fee is \$15, which includes breakfast, lunch, and handouts. For questions or to register, contact Casey Williams at the Izaak Walton League at (800) BUG-IWLA, ext. 220, or sos@iwla.org. Please register by Monday, April 15.

Water Resources Restoration, Protection, and Pollution Prevention

September 5–7, 2002

Athens, Georgia

Hosted by the Georgia Stream Buffer Initiative, this conference is intended for landowners interested in learning the value of water resources and how to restore and protect them, agency personnel who wish to learn techniques for establishing water protection programs in their area, and watershed groups and citizens concerned with protection and enhancement of water quality. This conference will provide a medium to promote awareness of the value of riparian buffer establishment, wetland restoration and protection, and citizen participation in the monitoring of water resources. The conference will feature success stories, current research, innovative techniques, and educational displays. A field tour of selected local sites with ongoing projects will be a highlight of the conference. A preconference workshop taught by Greg Jennings of North Carolina State University concerning stream bank restoration will be held on September 3-4, 2002. For more information, contact Dana Poole or Brandon Anderson, Georgia Stream Buffer Initiative Coordinators, at (706) 202-7098 or ocmulgee@yahoo.com.

Wetland Assessment and Restoration in New York State

April 17–18, 2002

Liverpool, New York

The eighth annual meeting of the New York State Wetlands Forum will examine a variety of wetland-related issues and developments and how these issues have impacts both statewide and regionally. This 2-day meeting consists of a keynote address, field trips, more than 40 different presentations in plenary and concurrent sessions, display tables, and time for informal

discussion. The conference is the premier forum in New York State for sharing information and improving communication on wetland issues and projects at the local, state, and regional levels. For more information, see <http://www.wetlandsforum.org/event/2002am/index.htm>.

[Top](#)

PREVIOUS LISTINGS

EMAP Symposium 2002

April 24–27, 2002

Pensacola Beach, Florida

The "Environmental Monitoring and Assessment Program (EMAP) Coastal Symposium 2001" is a 4-day symposium jointly sponsored by EPA's Office of Research and Development and the Council of State Governments. The symposium will provide a forum to present and discuss the results of successful programs. Federal, state, tribal, and academic scientists will be given the opportunity to develop new partnerships to advance the science of monitoring and assessing coastal resources. Topics for discussion at the symposium include

- Coastal 2000's scientific programs and how they have met state and tribal needs.
- Partnerships between federal, state, tribal, and academic organizations in coastal research and monitoring.
- The achievement of more efficient, less expensive, and more scientifically rigorous monitoring and assessment.
- How research can lead to a better understanding of the roles of monitoring, assessment, and identifying, diagnosing, and solving coastal problems.
- How academic research supported by ORD's Science to Achieve Results program has promoted the development of new ecological indicators for monitoring and assessing the condition of the coastal environment.

To post your restoration news and announcements, please send information to restorationupdate@tetrattech-ffx.com.

[Top](#)

Restoration-Related Web Sites

<http://www.ci.austin.tx.us/watershed/erosionprojects.htm>

Streambank Restoration and Erosion Management. The City of Austin, Texas's Watershed Protection and Development Review Department web site features pictures and descriptions of many of the city's completed restoration projects. *This site would be useful for anyone interested in different types of erosion control and restoration techniques.*

<http://www.invasivespecies.gov/>

Invasive Species. This site serves as the gateway to federal efforts concerning invasive species. At this site you can learn about the impacts of invasive species and the federal government's response, as well as read select species profiles and find links to agencies and organizations dealing with invasive species issues. <http://www.invasivespecies.gov> is also the web site for the National Invasive Species Council, which coordinates federal responses to the problem. *This site offers detailed information about the impact of invasive species.*

<http://www.evergladesvillage.net/>

Everglades Village. The Everglades Village is a resource for nongovernmental and governmental organizations and individuals that are working to sustain the environments and the communities in southern Florida. This web site provides directories of the individuals and organizations working toward Everglades restoration and the services and resources that they provide. An image gallery provides links to diverse sites that offer photographs and other images of the Everglades. *This site offers diverse information about South Florida's wetland ecosystems.*

<http://www.wetlandsforum.org/>

New York State Wetlands Forum. The Forum is a nonprofit group seeking to improve communication among people interested in wetlands and make available to Forum members and the public information that will increase their knowledge and understanding about wetlands. The Forum also calls attention to and objectively discusses local, statewide, regional, national, and global wetland issues as they relate to wetland issues in New York. *This site offers on-line wetland publications, information about upcoming events, and summaries of wetland-related news and announcements.*

<http://www.npwrc.usgs.gov/wetland/>

Evaluation of Restored Wetlands in the Prairie Pothole Region: Research Design and Overview. A multi-agency effort coordinated by the U.S. Geological Survey, Biological Resources Division Northern Prairie Wildlife Research Center, will conduct research to evaluate the success of wetland restorations in the Prairie Pothole region. Researchers will compare restored wetlands to natural wetlands of similar size and function to identify restoration and management strategies that produce the best results. *This site provides a link to a searchable restoration literature database and descriptions about separate intensive studies that eventually will be linked to the main study and would be useful for those interested in wetland restoration research in the Prairie Pothole region.*

<http://www.dnr.state.md.us/watersheds/surf/index.html>

Maryland's Surf Your Watershed. This web site contains information catalogued on a watershed basis to assist with watershed planning, management, conservation, and restoration projects. Information provided by the site includes watershed indicators of human stressors (including wetland losses), watershed profiles, restoration action strategies, and a bibliography of watershed documents. *This site would be useful for anyone seeking information, strategies, and data on restoring watersheds.*

<http://www.prbo.org/calpif/htmldocs/rhjb/>

Riparian Habitat Joint Venture. California Partners in Flight initiated the Riparian Habitat Joint Venture (RHJV) project in 1994. To date, 18 federal, state, and private organizations have signed the landmark Cooperative Agreement to protect and enhance habitats for native landbirds throughout California. This site describes the efforts of the RHJV to reinforce other collaborative efforts currently under way that protect biodiversity and enhance natural resources, as well as the human element they support. *This site provides ideas for developing collaborative efforts to protect riparian areas.*

http://www.ci.eugene.or.us/wewetlands/Self_Guided_Tour/sgtour.htm

Eugene Wetland Self-Guided Tour. This self-guided tour introduces readers to the types of wetlands found in the Eugene, Oregon, area and provides maps and pictures of publicly owned wetlands. This site is a good resource for those interested in learning about wetlands in Eugene, Oregon. *It is especially useful to Oregon school groups studying wetlands.*

<http://intersect.uoregon.edu/fieldguide/photos/april01/phototour.htm>

West Eugene Wetlands Photographs. In spring 2001 Dr. Uladzimir Slabin took approximately 5,000 photographs of the West Eugene Wetlands. This site provides links to this collection of pictures. *This site provides many detailed pictures of different types of wetlands.*

<http://www.riparian.net/>

Riparian Net. This site was created to meet the science and management needs of professionals doing riparian research. It provides information about the science behind riparian buffers, explores management options for buffers, provides a bibliography of relevant research, lists conferences, and offers a discussion board. *This site provides useful information for anyone interested in riparian buffer issues.*

<http://www.unl.edu/nac/riparian.html>

Riparian Forest Buffers. This site, maintained by the National Agroforestry Center at the University of Nebraska-Lincoln, offers a series of riparian buffer publications available for download. The publications include Riparian Buffers for an Agricultural Land, How to Design a Riparian Buffer for Agricultural Land, Riparian Buffer Design for Cropland, Riparian Buffer Systems in Crop and Rangelands, and others. *This site offers helpful information for someone interested in using riparian buffers in agricultural areas.*

Let us know about your restoration-related web site. Please send relevant URLs to restorationupdate@tetrattech-ffx.com.

[Top](#)

Information Resources

An Owasco Watershed Lake Association Citizen's Guide to the Design of Sustainable Streambank Protection and Riparian Habitat Restoration Practices

by Charles N. Greene, Niles Geomatics

Available at <http://www.cayuganet.org/owl/riparian/index.html>, this resource features information about riparian assessment and protection along upstate New York's Owasco Lake. The report explains the elements of the Dutch Hollow Brook Stream Corridor Management Project and includes extensive background information to prepare the reader. The report introduces issues such as the hydrological cycle, local geology, watershed boundaries, the elements of geomorphology, and the benefits of riparian buffers. It then describes how the Rosgen stream classification system was applied to the Dutch Hollow Brook stream corridor and how the classification can help determine the suitability of proposed stream stabilization and fish habitat restoration structures.

Red Clover Creek Erosion Control Demonstration Project: Ten-Year Research Summary (1985–1995)

by Pacific Gas and Electric Company (1997)

In 1985 Nevada's Feather River Coordinated Resource Management Committee implemented a small streambank stabilization and erosion control demonstration project in the headwaters of the East Branch North Fork Feather River watershed. To document results of the project, Pacific Gas and Electric's Research and Development Department and the California Department of Water Resources funded a 10-year research study along a 1-mile reach of Red Clover Creek. Available on-line at <http://www.feather-river-crm.org/publications/preports/red/red1.htm>, this document summarizes the results of the study.

Riparian Areas: Functions and Strategies for Management

By National Research Council (2002)

In 1999 the National Research Council (NRC) undertook a comprehensive study of riparian areas, with the sponsorship of seven federal agencies. The NRC reached four key conclusions: (1) Restoration of riparian functions along our nation's rivers and streams should be a national policy goal; (2) protection should be the goal for riparian areas in the best ecological condition, while restoration is needed for degraded riparian areas; (3) patience and persistence are needed in riparian management; and (4) although many riparian areas can be restored and managed to provide their natural functions, they are not immune to the effects of poor management in adjacent uplands. To read the entire report on-line, see

http://www.nap.edu/catalog/10327.html?onpi_topnews_032202.

If you'd like to publicize the availability of relevant information resources, please send information to restorationupdate@tetrattech-ffx.com.